

### CLAIMS LISTING

- 1.(original) Image storage screen or panel comprising a binderless needle-shaped stimuable phosphor and a substrate, characterized in that said substrate has a surface roughness of less than 2  $\mu\text{m}$  and a reflectivity of more than 80%.
- 2.(original) Screen or panel according to claim 1, wherein said reflectivity is at least 90%.
- 3.(original) Screen or panel according to claim 1, wherein said reflectivity is at least 95%.
- 4.(original) Screen or panel according to claim 1, wherein said substrate has a surface roughness of less than 1  $\mu\text{m}$ .
- 5.(original) Screen or panel according to claim 2, wherein said substrate has a surface roughness of less than 1  $\mu\text{m}$ .
- 6.(original) Screen or panel according to claim 3, wherein said substrate has a surface roughness of less than 1  $\mu\text{m}$ .
- 7.(original) Screen or panel according to claim 1, wherein said phosphor is a CsX:Eu phosphor, wherein X is selected from Br and Cl.

- 8.(original) Screen or panel according to claim 2, wherein  
said phosphor is a CsX:Eu phosphor, wherein X is selected  
from Br and Cl.
- 9.(original) Screen or panel according to claim 3, wherein  
said phosphor is a CsX:Eu phosphor, wherein X is selected  
from Br and Cl.
- 10.(original) Screen or panel according to claim 4, wherein  
said phosphor is a CsX:Eu phosphor, wherein X is selected  
from Br and Cl.
- 11.(original) Screen or panel according to claim 5, wherein  
said phosphor is a CsX:Eu phosphor, wherein X is selected  
from Br and Cl.
- 12.(original) Screen or panel according to claim 6, wherein  
said phosphor is a CsX:Eu phosphor, wherein X is selected  
from Br and Cl.
- 13.(original) Screen or panel according to claim 1, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 14.(original) Screen or panel according to claim 2, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.

- 15.(original) Screen or panel according to claim 3, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 16.(original) Screen or panel according to claim 4, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 17.(original) Screen or panel according to claim 5, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 18.(original) Screen or panel according to claim 6, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 19.(original) Screen or panel according to claim 7, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 20.(original) Screen or panel according to claim 8, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 21.(original) Screen or panel according to claim 9, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.

- 22.(original) Screen or panel according to claim 10, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 23.(original) Screen or panel according to claim 11, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 24.(original) Screen or panel according to claim 12, wherein  
said substrate is an amorphous carbon layer, overcoated  
with a reflecting layer.
- 25.(original) Screen or panel according to claim 13, wherein  
said reflecting layer is an aluminum layer.
- 26.(original) Screen or panel according to claim 14, wherein  
said reflecting layer is an aluminum layer.
- 27.(original) Screen or panel according to claim 15, wherein  
said reflecting layer is an aluminum layer.
- 28.(original) Screen or panel according to claim 16, wherein  
said reflecting layer is an aluminum layer.
- 29.(original) Screen or panel according to claim 17, wherein  
said reflecting layer is an aluminum layer.
- 30.(original) Screen or panel according to claim 18, wherein  
said reflecting layer is an aluminum layer.

- 31.(original) Screen or panel according to claim 19, wherein  
said reflecting layer is an aluminum layer.
- 32.(original) Screen or panel according to claim 20, wherein  
said reflecting layer is an aluminum layer.
- 33.(original) Screen or panel according to claim 21, wherein  
said reflecting layer is an aluminum layer.
- 34.(original) Screen or panel according to claim 22, wherein  
said reflecting layer is an aluminum layer.
- 35.(original) Screen or panel according to claim 23, wherein  
said reflecting layer is an aluminum layer.
- 36.(original) Screen or panel according to claim 24, wherein  
said reflecting layer is an aluminum layer.
- 37.(original)Screen or panel according to claim 1, wherein a  
moisture-repellent layer is present inbetween said  
substrate and said phosphor layer.
- 38.(original) Screen or panel according to claim 4, wherein a  
moisture-repellent layer is present inbetween said  
substrate and said phosphor layer.
- 39.(original) Screen or panel according to claim 7, wherein a  
moisture-repellent layer is present inbetween said  
substrate and said phosphor layer.

- 40.(original) Screen or panel according to claim 13, wherein a moisture-repellent layer is present inbetween said substrate and said phosphor layer.
- 41.(original) Screen or panel according to claim 1, wherein, adjacent to the said phosphor layer, a moisture-repellent layer is coated as an outermost layer.
- 42.(original) Screen or panel according to claim 4, wherein, adjacent to the said phosphor layer, a moisture-repellent layer is coated as an outermost layer.
- 43.(original) Screen or panel according to claim 7, wherein, adjacent to the said phosphor layer, a moisture-repellent layer is coated as an outermost layer.
- 44.(original) Screen or panel according to claim 13, wherein, adjacent to the said phosphor layer, a moisture-repellent layer is coated as an outermost layer.
- 45.(original) Screen or panel according to claim 37, wherein said moisture-repellent layer is a parylene layer.
- 46.(original) Screen or panel according to claim 38, wherein said moisture-repellent layer is a parylene layer.
- 47.(original) Screen or panel according to claim 39, wherein said moisture-repellent layer is a parylene layer.

- 48.(original) Screen or panel according to claim 40, wherein  
said moisture-repellent layer is a parylene layer.
- 49.(original) Screen or panel according to claim 41, wherein  
said moisture-repellent layer is a parylene layer.
- 50.(original) Screen or panel according to claim 42, wherein  
said moisture-repellent layer is a parylene layer.
- 51.(original) Screen or panel according to claim 43, wherein  
said moisture-repellent layer is a parylene layer.
- 52.(original) Screen or panel according to claim 44, wherein said  
moisture-repellent layer is a parylene layer.
- 53.(original) Use of a screen or panel according to claim 1 in  
a system for computed radiography.
- 54.(original) Use of a screen or panel according to claim 4 in  
a system for computed radiography.
- 55.(original) Use of a screen or panel according to claim 7 in  
a system for computed radiography.
- 56.(original) Use of a screen or panel according to claim 13 in  
a system for computed radiography.
- 57.(original) Use of a screen or panel according to claim 37 in  
a system for computed radiography.

- 58.(original) Use of a screen or panel according to claim 41 in a system for computed radiography.
- 59.(original) Use of a screen or panel according to claim 45 in a system for computed radiography.
- 60.(original) Use of a screen or panel according to claim 53 in mammographic applications.
- 61.(original) Use of a screen or panel according to claim 54 in mammographic applications.
- 62.(original) Use of a screen or panel according to claim 55 in mammographic applications.
- 63.(original) Use of a screen or panel according to claim 56 in mammographic applications.
- 64.(original) Use of a screen or panel according to claim 57 in mammographic applications.
- 65.(original) Use of a screen or panel according to claim 58 in mammographic applications.
- 66.(original) Use of a screen or panel according to claim 59 in mammographic applications.